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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,870	09/09/2003	Rene N. Ritter	414-34391-USCP	2078
44871	7590	06/06/2006	EXAMINER	
MADAN, MOSSMAN & SRIRAM, P.C.			LEDYNH, BOT L	
2603 AUGUSTA			ART UNIT	
SUITE 700			PAPER NUMBER	
HOUSTON, TX 77057			2862	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/657,870

Applicant(s)

RITTER ET AL.

Examiner

Bot LeDyhn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) 34-90 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 20-22 and 91-93 is/are rejected.
- 7) ☒ Claim(s) 6-19 and 23-33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/8/05.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

*Bot LeDyhn*  
primary Examiner

### **DETAILED ACTION**

Claims 34-90 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected groups II and III, there being no allowable generic or linking claim.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 22 and 91-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bittar in view of Moriarty (EP 0723067). Bittar discloses substantially the same invention as claimed (see Office Action dated 2/3/05), except for a device maintaining the resistivity sensor at an offset from a wall of the borehole that is greater than a specified minimum value. Moriarty discloses such a device (the wear band 17). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bittar by employing Moriarty's wear band 17 in order to provide a stand off for the resistivity sensor so that the resistivity sensor would not be effected by hostile well drilling conditions (see column 2 lines 43-56).

Claims 20-21 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bittar in view of Moriarty (EP 0723067) as applied to claims 1-5, 22 above, and

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further in view of Aronstam et al. Bittar in view of Moriarty (EP 0723067) discloses substantially the same invention as claimed, except for the orientation sensor comprising a magnetometer, or an accelerometer. Aronstam et al discloses that orientation sensors include magnetometers and/or accelerometer for determining the position with respect to a known point and inclination of a drilling assembly during drilling of the wellbore (see col.5, lines 22-35). It would have been obvious to one of ordinary skill in the art to modify Bittar by including a magnetometer and/or an accelerometer for determining the position with respect to a known point and inclination of a drilling assembly during drilling of the wellbore.

### ***Allowable Subject Matter***

Claims 6-19, and 23-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

It should be noted that application serial Number 09/836,980 does not support claimed limitations such as, "specified offset," or "toolface angle" (see independent claims). Consequently, the effective filing date of the instant application is its filing date.

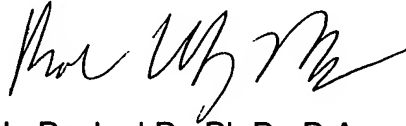
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Bot LeDinh whose telephone number is 5712722231. The examiner can normally be reached on Maxiflex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 5712722180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Bot LeDinh', is positioned above the printed name.

Bot LeDinh, J.D., Ph.D., D.A.  
Primary Examiner

BL/ 2006